

Amendments to the Claims

This listing of claims will replace all prior versions, and listings, of claims in the application:

1. (Currently amended) A genetically altered neoplastic cell useful as an immunostimulatory agent against a tumor of interest, said genetically altered neoplastic cell comprising:

a neoplastic cell of mammalian origin which is representative of the cells constituting a tumor of interest; a genetically altered genome including at least one extra nucleotide segment comprising a viral vector and at least one ~~not less than one~~ DNA sequence encoding molecule B7.1, intracellular adhesion molecule-1 (ICAM-1) and leukocyte function-associated antigen-3 (LFA-3) as specific products; the capacity to overexpress molecule B7.1, intracellular adhesion molecule-1 (ICAM-1) and leukocyte function-associated antigen-3 (LFA-3) as discrete products and functional costimulatory molecules; and the capability to interact with and to activate CD4+ and CD8+ T-cell lymphocytes in-situ.

2. (Currently amended) A genetically altered neoplastic cell preparation useful as a prophylactic vaccine *in-vivo* to prevent the generation of a tumor within the body of a living mammalian subject, said genetically altered neoplastic cell preparation comprising:

a plurality of transduced neoplastic cells of mammalian origin which are representative of the tumor to be prevented within the body of the living mammalian subject and which have the capability to interact with and to activate CD4+ and CD8+ T-cell lymphocytes in-situ, said transduced neoplastic cells (i) being transduced with a viral vector carrying at least one ~~not less than one~~ DNA sequence encoding molecule B7.1, intracellular adhesion molecule-1 (ICAM-1) and leukocyte function-associated antigen-3 (LFA-3); and (ii) overexpressing molecule B7.1, intracellular adhesion molecule-1 (ICAM-1) and leukocyte function-associated antigen-3 (LFA-3) as discrete peptides and functional costimulatory molecules.

3. (Currently amended) A genetically altered neoplastic cell preparation useful as a therapeutic anti-tumor agent in-vivo to treat clinically a pre-existing tumor within the body of a living mammalian subject, said genetically altered neoplastic cell preparation comprising:

a plurality of transduced neoplastic cells of mammalian origin which are representative of the cells in the pre-existing tumor within the body of the living mammalian subject and which

have the capability to interact with and to activate CD4+ and CD8+ T-cell lymphocytes in-situ, said transduced neoplastic cells (i) being transduced with a viral vector carrying at least one ~~not less than one~~ DNA sequence encoding molecule B7.1, intracellular adhesion molecule-1 (ICAM-1) and leukocyte function-associated antigen-3 (LFA-3); and (ii) overexpressing molecule B7.1, intracellular adhesion molecule-1 (ICAM-1) and leukocyte function-associated antigen-3 (LFA-3) as discrete peptides and functional costimulatory molecules.

4. (Currently amended) A method for making a genetically altered neoplastic cell useful as an agent against a tumor of interest, said method comprising the steps of:

obtaining a neoplastic cell of mammalian origin which is representative of the cells constituting a tumor of interest;

altering the genome of said neoplastic cell by introduction of at least one extra nucleotide segment comprising a viral vector and at least one ~~not less than one~~ DNA sequence encoding molecule B7.1, intracellular adhesion molecule-1 (ICAM-1) and leukocyte function-associated antigen-3 (LFA-3) as specific products;

allowing said altered genome of said neoplastic cell to express molecule B7.1, intracellular adhesion molecule-1 (ICAM-1) and leukocyte function-associated antigen-3 (LFA-3) as discrete products and functional co-stimulatory molecules.

5. (Currently amended) A method for making a transduced neoplastic cell preparation useful as an immunostimulatory agent in-vivo effective against a tumor of interest, said method comprising the steps of: obtaining a plurality of neoplastic cells of mammalian origin which is representative of the tumor of interest;

transducing such neoplastic cells with a viral vector carrying at least one ~~not less than one~~ DNA sequence encoding B7.1, intracellular adhesion molecule-1 (ICAM-1) and leukocyte function-associated antigen-3 (LFA-3); and

allowing said transduced neoplastic cells to overexpress molecule B7.1, intracellular adhesion molecule-1 (ICAM-1) and leukocyte function-associated antigen-3 (LFA-3) as discrete peptides and functional costimulatory molecules.

6. (Currently amended) A method of in-vivo prophylaxis to prevent the generation of a tumor in a living mammalian subject, said in-vivo prophylaxis method comprising the steps of:

obtaining a vaccine comprising a plurality of transduced neoplastic cells of mammalian origin which are representative of the tumor to be prevented within the body of the living mammalian subject, wherein said transduced neoplastic cells (i) have been transduced with a viral vector carrying at least one ~~not less than one~~ DNA sequence encoding molecule B7.1, intracellular adhesion molecule-1 (ICAM-1) and leukocyte function-associated antigen-3 (LFA-3), and (ii) overexpressing molecule B7.1, intracellular adhesion molecule-1 (ICAM-1) and leukocyte function-associated antigen-3 (LFA-3) as discrete peptides and functional costimulatory molecules;

administering said vaccine to the body of the living mammalian subject; and allowing said transduced neoplastic cells of said administered vaccine to interact with and to activate CD4+ and CD8+ T-cell lymphocytes *in-vivo* within the living mammalian subject.

7. (Currently amended) A method of in-vivo therapeutic treatment effective against a pre-existing tumor in a living mammalian subject, said in-vivo therapeutic treatment method comprising the steps of:

obtaining a cell preparation comprising a plurality of transduced neoplastic cells of mammalian origin which are representative of the cells in the pre-existing tumor within the body of the living mammalian subject, wherein said transduced neoplastic cells (i) have been transduced with a viral vector carrying at least one ~~not less than one~~ DNA sequence encoding molecule B7.1, intracellular adhesion molecule-1 (ICAM-1) and leukocyte function-associated antigen-3 (LFA-3), and (ii) overexpressing molecule B7.1, intracellular adhesion molecule-1 (ICAM-1) and leukocyte function-associated antigen-3 (LFA-3) as discrete peptides and functional costimulatory molecules;

administering said cell preparation to the body of the living mammalian subject as an anti-tumor agent; and allowing said transduced neoplastic cells of said administered cell preparation to interact with and to activate CD4+ and CD8+ T-cell lymphocytes *in-vivo* within the living mammalian subject.